



## ABSTRACT

The warming ability of skin has been measured by thermometer, which sensor was cooled upto 17-18 deg.C before its contact with skin.

The warming rate of thermometer during its 30sec contact with forearm skin depended on position of the sensor of that thermometer: the warming was faster over pulsation of a. radialis in compare to its position on the back of the wrist. Besides, the warming rate on former position (i.e. over-artery position) well-correlated with the body surface area ( $r=0,65$ ) and pulse pressure ( $r=0,58$ ), whereas there were no any correlations of results obtained from latter position (i.e. back of the wrist).

The bioheat transfer, as the reason of abovementioned warming over-artery position, was provided by blood flow within a radial artery, i.e. forced convection. Thus, through assessment of warming rate of cooled thermometer over a radial artery pulsation and application of the laws of thermodynamics we can measure cardiac output of the human body.

